

Public Health Surveillance & Reporting

Mission

To protect and promote human health in Indiana by identifying and tracking important diseases, investigating disease outbreaks, and providing high quality data to public health institutions.

Summary of Activities

The **Indiana State Department of Health (ISDH)** is primarily responsible for public health surveillance and reporting. One of the essential services provided by the ISDH is the gathering of information on the occurrence of diseases and other health events (e.g., births and deaths). Physicians, hospitals, and laboratories are among the health care professionals that ISDH relies upon for the surveillance portion of this function. These populations submit reports and data to the ISDH, which is then aggregated with other data sources to provide a comprehensive picture of health events in Indiana.

In addition to reports received from others, the ISDH also conducts surveys to obtain health information. The most prominent survey is the Behavioral Risk Factor Surveillance System, which gathers data on obesity, exercise, diabetes, and other key health behaviors.

The ISDH maintains an extensive collection of public health information on its website at www.state.in.us/isdh. It includes an annual report on the prevalence of diseases of public interest, reports on cancer incidence, and mortality statistics.

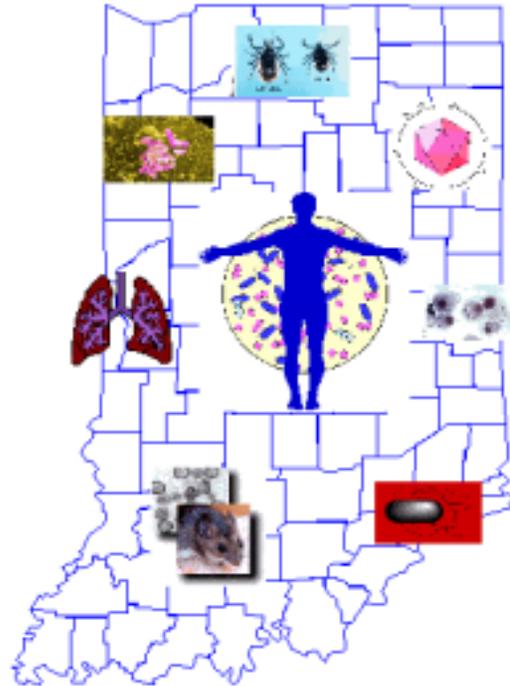
The ISDH uses Geographic Information System (GIS) methodology to analyze state and local mortality and morbidity data across ISDH programs. GIS uses computer technology to provide a visual map of specifically defined populations represented in geographic areas. By comparing and coupling geographic population data with local health indicators and local health resources, the ISDH has a powerful tool to more appropriately target resources and funding.

The ISDH produces several reports on health events and disease occurrence in Indiana. Some typical reports include the Indiana Mortality Report, Indiana Cancer Mortality Report, Behavioral Risk Factor Report, Indiana Natality Report, Indiana Hospital Consumer Guide, and Indiana Terminated Pregnancy Report. The ISDH responds to thousands of requests for information each year from other health agencies, health organizations, businesses, and members of the public.

External Factors

Effective public health surveillance is dependant on an active partnerships with doctors, hospitals, and community health organizations. Non-reporting, late reporting, and incomplete reporting of data by health care professionals has limited the effectiveness of the public health surveillance system.

The surveillance system must be responsive to the changing nature and prevalence of infectious diseases. Emerging and re-emerging infectious diseases -- those that are either new to medicine or were once thought to have been conquered - must be added to the surveillance system, and reporting parties must be made aware of their existence.



Evaluation and Accomplishments

Despite increasing demands on surveillance services, the ISDH continues to provide timely and accurate surveillance for diseases of public health interest, investigate disease outbreaks, and track the human health effects of environmental contaminants.

The Indiana Childhood Lead Poisoning Prevention Program demonstrated the significant benefits of the GIS reporting system. By comparing computer maps of high environmental lead concentrations with maps of high levels of childhood lead poisoning, the ISDH was able to adopt screening policies and procedures that focus on the most at-risk neighborhoods throughout Indiana. Similarly, the use of GIS to identify specific at-risk locations for infant mortality and other adverse health outcomes has fostered discussions with local health officials on how to improve health outcomes in those areas.

Summary of Trends in Reportable Diseases
Five-Year Totals: Indiana, 1995 - 1999

Disease	1995	1996	1997	1998	1999	Five year Mean	Five year Median
AIDS	481	602	502	476	356	483	481
Campylobacteriosis	655	693	571	605	511	607	605
Chlamydia	9,464	10,100	9,979	11,267	11,884	10,539	10,100
Cryptosporidiosis	113	59	49	58	47	65	58
E. coli O157: H7	63	83	75	91	107	84	83
Giardiasis	908	874	718	736	654	778	736
Gonorrhea	9,224	6,425	6,383	6,643	6,154	6,966	6,425
Hepatitis A	188	366	327	156	105	228	188
Hepatitis B	223	148	89	101	77	128	101
Histoplasmosis	125	88	94	97	75	96	94
Legionellosis	50	23	46	71	53	49	50
Listeriosis	19	19	11	17	12	16	17
Lyme Disease	14	16	16	22	13	16	16
Malaria	20	16	17	9	22	17	17
Measles	0	0	0	3	2	1	0
Meningococcal Disease	56	63	55	70	76	64	63
Mumps	10	8	15	7	5	9	8
Pertussis	76	128	104	185	90	117	104
Rabies, Animal	24	9	13	12	13	14	13
Rocky Mt. Spotted Fever	9	7	1	2	10	6	7
Saimonellosis	700	590	586	649	572	619	590
Shigellosis	395	161	94	159	368	235	161
P&S Syphilis	335	207	148	212	449	270	212
Tuberculosis	199	202	168	188	150	181	188
Typhoid Fever	3	4	3	2	6	4	3
Yersiniosis	9	13	10	16	19	13	13

Plans for the Biennium

- 1) Chronic diseases kill more Indiana residents than all other causes combined. The ISDH will develop a chronic disease epidemiology program to support the parallel development of chronic disease prevention programs.
- 2) The ISDH will increase the use of GIS to support policy development, program planning, epidemiologic studies, and presentation of data to the public through the ISDH web site.
- 3) The ISDH will continue to be heavily involved in providing training to local health departments, often in cooperation with the **Indiana University** School of Medicine's Department of Public Health.

